

REMARKS

Appended to this response is a form granting the undersigned an associate power of attorney, and that further directs all future correspondence be mailed to the undersigned at the address appearing below (i.e., the address for customer number 29683). It is respectfully requested that this information be entered into the record for this application.

In response to the objection to the drawings, a new set of Figures and corresponding annotated sheets is enclosed. The various elements have been labeled with text taken from the specification. The addition of the two arrow inputs Current_Tree and Current_Time to mapper block 203 of Fig. 2 is supported at page 7, lines 12-14. No new matter is added. In making the drawing amendment it was discovered that element 305 in Figs. 3a and 3b was used for two different purposes, and this oversight was corrected in Fig. 3a and in the specification at page 9.

In response to the objection to the claims, each of the claims identified by the Examiner has been amended. These amendments are deemed to be merely cosmetic in nature, they were not made for a reason related to patentability, and the full scope and range of equivalents for all of the affected claim elements should remain intact. Other amendments of a merely cosmetic nature were also made, such as deleting references to "steps of" in the method claims and "a means" in the apparatus claims. Note that the amendment to the claims renumbered claims 30 and 31 as 28 and 29, respectively. Any subsequent reference to claims 28 and 29 is made to the claims as currently amended.

In response to the rejection of claims 1-11 and 19-29 under 35 U.S.C. 112, second paragraph, claims 1 and 19 have each been amended to recite that the data structure is a "time-ordered data structure" that includes the "future portion", and that the transmitted packet is one "associated with the removed tag". Without admitting that the claims were indefinite or unclear before this amendment was made, the claims 1 and 19 as rewritten should be found to clearly free of any indefinite subject matter, and the Examiner is respectfully requested to reconsider and remove the rejection under 35 U.S.C. 112, second paragraph.

It is hereby made of record that the amendments to claims 1 and 19 are also deemed to be merely cosmetic in nature, that the amendments were not actually related to the patentability of the amended claims, and that the full scope and range of equivalents for all of the affected elements of claims 1 and 19 should remain intact.

Prior to addressing the prior art rejections, it is noted that claims 8, 9, 11, 18, 26, 27 and 29 were objected to as depending from a rejected base claim. In response, each of these claims has been rewritten in independent form to include the subject matter of the base claim and any intervening claims (as amended above). As a result, an early notification of the allowance of each of the amended claims 8, 9, 11, 18, 26, 27 and 29 is earnestly solicited.

Turning now to the prior art rejections of the remaining claims under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) based on Lauer et al. (US 5,455,825), the following points are herewith noted.

Despite the Examiner's statement that Lauer et al. disclose "selecting a selected tree from at least two trees", etc., when rejecting claim 12, the ATM switch scheduling system of Lauer et al. is actually disclosed to work with a single "common queue" wherein a newly arrived cell is inserted, and where the cell is simply "appended to the tail of the queue of cells awaiting transmission" (see, for example, col. 3, lines 39-43, and col. 4, lines 22-24).

Note in this regard that the "binary tree" and "tree architectures" discussed by Lauer et al. in col. 11, line 16, to col. 13, line 15, in reference to Figs. 4, 5 and 6, appear to be in the context of a tree-structured comparator for comparing the queue entries, including the partitioned queue embodiment discussed with regard to Fig. 6 (see col. 12, line 31, to col. 13, line 2). That is, there is no disclosure of tags associated with packets being stored in binary trees in the manner that is disclosed and claimed in this invention.

In order to even further clarify the claimed subject matter, independent claim 1 has been amended to recite in part that:

"adding includes **inserting the tag as a node into a tree that is selected from a plurality of trees**",

independent claim 12 has been amended to recite in part that storing the selected tag in an order in the selected tree is accomplished:

"by **adding a node to the selected tree**", and

independent claim 19 has been amended to recite in part that:

"said means for adding **inserts the tag as a node into a tree that is selected from a plurality of trees**" (emphasis added).

Support for these amendments can be found in the specification at least at page 8, lines 15-18, where it is stated that:

".. mapper 203 selects a selected tree among a preset number of trees in the data structure 100 thus performing a mapping function. Sorted insert 207 adds a node to a selected tree, such as in Fig. 1B, thus inserting the tag."

No new matter is added by this clarifying amendment to claims 1, 12 and 19.

It is not seen where the concept of adding a tag as a node in a tree is either disclosed or suggested by Lauer et al. This being the case, claims 1, 12 and 19 should all be found to be allowable, as should all claims that depend from claim 1, 12 and 19.

The Examiner is respectfully requested to reconsider and remove the rejections of the claims under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) based on Lauer et al., and to allow all of the pending claims 1-29 as now presented for examination. An early notification of the allowability of claims 1-29 is earnestly solicited.

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